REMARKS

This paper is filed in response to the office action dated January 21, 2011, in the above-referenced application. This paper is timely filed as it is accompanied by an appropriate petition for extension of time and authorization to charge our credit card account in the amount of the requisite fee. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 13-2855, under Order No. 29610/CDT499.

Claims 1-18 are pending, but claims 1-12, 17, and 18 have been withdrawn from consideration as directed to non-elected embodiments. By the foregoing, claim 10 has been canceled without prejudice or disclaimer and new claims 19-21 have been added. Support for new claim 19 may be found, for example, at the first paragraph of page 14 of the specification. Support for new claim 20 may be found, for example, at the third paragraph of page 16. Support for new claim 21 may be found, for example, at the fourth paragraph of page 18 of the specification. No new matter has been added. No additional claims fees are due.

Reconsideration of the application is respectfully requested in view of the following comments.

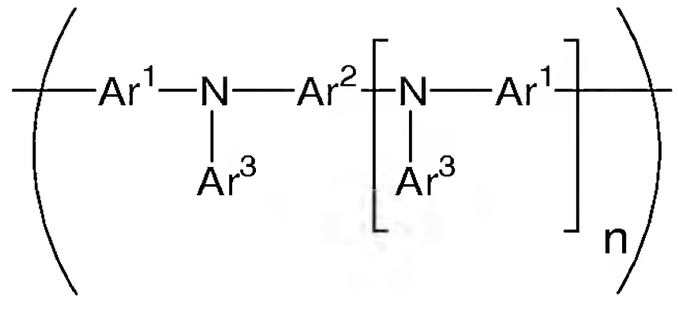
CLAIM REJECTIONS

Claim Rejections under 35 USC §103(a)

All considered claims 13-16 have been rejected under 35 U.S.C. §103(a) as assertedly obvious over U.S. Patent No. 6,309,763 to Woo et al. ("Woo") in view of U.S. Patent Publication No. 2003/0082402 to Zheng et al. ("Zheng") and U.S. Patent Publication No. 2003/0096138 to Lecloux et al. ("Lecloux").

The claim rejections are respectfully traversed.

Claim 13 is directed to an organic light emitting diode comprising, in sequence, an anode; a hole transporting layer; an electroluminescent layer comprising a phosphorescent material and a host material; and a cathode, wherein the hole transporting layer is a polymer comprising an optionally substituted repeat unit of formula (I):



(I)

wherein each Ar^1, Ar^2 and Ar^3 is the same or different and independently represents optionally substituted aryl; and n is 0 or 1.

Woo discloses an electroluminescent device comprising an anode, a hole transporting layer comprising PFA, an electroluminescent layer, and a cathode. As conceded by the examiner at page 3 of the action, Woo does not teach an electroluminescent layer comprising a phosphorescent material and a host material, as claimed. Rather, the electroluminescent materials in Woo are fluorescent materials. Thus, the examiner turned to Zheng and Lecloux, asserting that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the light emitting device of Woo so that the electroluminescent layer was doped with a phosphorescent dopant, such as a metal complex." *See* page 4 of the outstanding action.

However, under any rationale used to support a conclusion of obviousness, the proposed modifications must lead to predictable results. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395 (2007). In this respect, the applicants respectfully submit that the results of the proposed modification would not be predictable to one of ordinary skill in the art because fluorescent materials and phosphorescent materials emit by different mechanisms and the selection of a hole-transporting material of a hole-transporting layer of an OLED may affect the performance of a phosphorescent device in ways that are not found in a corresponding fluorescent device.

For example, fluorescent light is produced by radiative decay of short-lived singlet excitons. On the other hand, phosphorescent light is produced by radiative decay of relatively long-lived triplet excitons. Indeed, the lifetime of a triplet exciton may be long enough to allow it to migrate from the light-emitting layer into other layers of the device (and this is not the case for singlet excitons). If the triplet exciton encouters a species that has a triplet energy level that is lower than the energy of the triplet exciton, then the exciton may be quenched. *See*, for example, the second paragraph of page 8 of the application. In particular, the hole-transporting layer may

cause quenching of phosphorescent emission from a phosphorescent light-emitting layer (and this would not be an issue for a fluorescent light-emitting layer because of the short life of singlet excitons). As a result, one of ordinary skill would not necessarily expect a hole transporting layer useful in fluorescent devices to also be useful in phosphorescent devices. Consequently, it cannot be maintained that the substitution of a phosphorescent material and a host material for a fluorescent material in a device comprising a hole transporting layer as claimed would lead to predictable results. Rather, in contrast to the finding of predictable results necessary to sustain an obviousness rejection, the claimed combination provides unexpected benefits as shown by the application examples.

In view of the foregoing, the applicants further respectfully submit that fluorescent and phosphorescent emitters are not necessarily interchangeable in OLEDs, much less in an OLED having a specific hole transporting layer as claimed, and consequently one of ordinary skill in the art would neither (i) have the requisite motivation to make the proposed modification nor (ii) have a reasonable expectation of success. The outstanding claim rejections should therefore be removed.

CONCLUSION

It is submitted that the application is in condition for allowance. Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, the examiner is respectfully invited to contact the undersigned attorney at the indicated telephone number.

Respectfully submitted,

MARSHALL, GERSTEIN & BORUN LLP

July 21, 2011

/Andrew M. Lawrence/

Andrew M. Lawrence, Reg. No. 46,130
Attorney for Applicants
6300 Willis Tower
233 S. Wacker Drive
Chicago, Illinois 60606-6357
(312) 474-6300